

**CLAIMS:**

1. A method for treating a disease selected from diabetes mellitus and atherosclerosis comprising administrating to a subject an effective amount of crude *Dunaliella* powder.
- 5 2. A method for reducing triglycerides and/or increasing HDL cholesterol levels in the plasma of a subject comprising administrating to the subject an effective amount of crude *Dunaliella* powder.
3. The method according to claim 1 wherein said crude *Dunaliella* powder is administered together with one or more activators of nuclear receptors.
- 10 4. The method according to Claim 3 wherein the activators of nuclear receptors are peroxisome proliferator-activated receptor  $\alpha$  or  $\gamma$  (PPAR $\alpha$  or PPAR $\gamma$ ) agonists.
5. The method according to Claim 4 wherein the PPAR $\alpha$  or PPAR $\gamma$  agonists are selected from fibrates and thiazolidinediones.
- 15 6. The method according to Claim 5 wherein the fibrates are selected from clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and gemfibrozil.
7. The method according to Claim 5 wherein the thiazolidinediones are selected from avandia, troglitazone, BRL 49653, pioglitazone, ciglitazone, WAY-120,744, englitazone, AD 5075, darglitazone and rosiglitazone.
- 20 8. The method according to Claim 1 wherein said crude *Dunaliella* powder is administered orally.
9. The method according to Claim 1 wherein said algae is *Dunaliella bardawil*.
10. The method according to Claim 1, wherein said powder is encapsulated.
- 25 11. The method according to claim 2 wherein said crude *Dunaliella* powder is administered together with one or more activators of nuclear receptors.
12. The method according to Claim 11 wherein the activators of nuclear receptors are peroxisome proliferator-activated receptor  $\alpha$  or  $\gamma$  (PPAR $\alpha$  or PPAR $\gamma$ ) agonists.

13. The method according to Claim 12 wherein the PPAR $\alpha$  or PPAR $\gamma$  agonists are selected from fibrates and thiazolidinediones.
14. The method according to Claim 13 wherein the fibrates are selected from clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and gemfibrozil.
- 5 15. The method according to Claim 13 wherein the thiazolidinediones are selected from avandia, troglitazone, BRL 49653, pioglitazone, ciglitazone, WAY-120,744, englitazone, AD 5075, darglitazone and rosiglitazone.
16. The method according to Claim 2 wherein said crude *Dunaliella* powder is administered orally.
- 10 17. The method according to Claim 2 wherein said algae is *Dunaliella bardawil*.
18. The method according to Claim 2, wherein said powder is encapsulated.